

Shock Waves in Magnetohydrodynamics, by
M. N. Kogan, 2 pp.

RUSSIAN, per, Is Ak Nauk SSSR, Otdel. Tekh.
Nauk, Mekhanika i Mashinostroyeniye, No 3,
pp 143-146, 1960.

ARS Journal
Vol 32, No 5

Sci - *Anger*

Jun 62

198,626

Yegorova, I. I. and Ogandzhanyants, V. G.
SIMULATION OF THE PROCESSES OF OIL DIS-
PLACEMENT FROM STRATIFIED POROUS MEDIA.
[1961] 6p.

Order from ATS \$14.15

ATS-75M46R

Trans. of Akad[emiya] Nauk SSSR, Otdel[eniye]--
Tekhnicheskikh Nauk. [Izvestiya] Mekhanika i
Mashinostroyeniye, 1960, no. 3, p. 147-151.

61-22216

1. Soils--Porosity
2. Porous materials--
Physical properties
3. Petroleum--Recovery

I. Yegorova, I. I.

II. Ogandzhanyants, V. G.

III. ATS-75M46R

IV. Associated Technical
Services, Inc.,
East Orange, N. J.

152100

ATS/RJ-2784

Office of Technical Services

(Engineering--Chemical, TT, v. 5, no. 12)

Maksimov, V. A.
THE INFLUENCE OF NONHOMOGENEITIES ON
THE DETERMINATION OF RESERVOIR PARAM-
ETERS BASED ON DATA ON UNSTEADY-STATE
FLUID INFLUX INTO WELLS; A CASE OF A TWO-
LAYER FORMATION. [1961] 6p.
Order from ATS \$8.95

ATS-74M46R

Trans. of Akademiya Nauk SSSR, Otdel'eniye
Tekhnicheskikh Nauk, Izvestiya Mekhanika i
Mashinostroyeniye, 1960, no. 3, p. 151-154.

61-22238

1. Water supplies--
Determination
2. Fluid flow--Mathematical
analysis

- I. Maksimov, V. A.
- II. ATS-74M46R
- III. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS/RJ-2781
160909

Office of Technical Services

(Engineering--Civil, TT, v. 5, no. 12)

61-22221

Donat, E. V.
THE CRITICAL FLOW CONDITION IN AN ASCENDING GAS STREAM CARRYING SOLID PARTICLES.
[1961] 4p.
Order from ATS \$5.60

ATS-97M45R

Trans. of Akademiya Nauk SSSR. Otdel[ente]
Tekhnicheskikh Nauk. Izvestiya Mekhanika i
Mashinostroenie, 1960, no. 3, p. 163-164.

DESCRIPTORS: *Gas flow, *Hydrodynamics, Particles,
Transportation, Gases, Solids.

(Mechanics--Hydrodynamics, TT, v. 6, no. 4)

I. Donat, E. V.
II. ATS-97M45R
III. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS/RJ-2946

1777(11)

Office of Technical Services

Magneto-Vortical Rings, by Yu. P. Izobikov.
8 pp.

RUSSIAN, per: Iz Ak Nauk SSSR, Otdel Tekh Nauk;
Mekh i Mash, No 4, 1960, pp 7-13.

ARS

Vol XXXI, No 11

Sci -- Phys

179,300

17 Jan 62

Dispersal of Conducting Gas by a
Running Magnetic Field, by V. B. Baranov,
10 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Mekh i Mash,
No 4, 1960, pp 14-18. P100063566
FTD-TT-65-1476

Sci - Phys
Oct 66

312,880

On the Effect of the Atomization of a Liquid
Jet Introduced into a Gas Stream on the Flow
Parameters Beyond the Mixing Zone, by
S. D. Malyushinets.

RUSSIAN, per, Izvestiya AN SSSR, Otdeleniye
Tekhnicheskikh Nauk, Mekhanika i Mashino-
stroeniye, No 4, 1960, pp 19-24.
*FTD-HT-23-559-68

Sci-Physics
Aug 68

Nikolaevskii, V. N.
AVERAGE SIMILARITY OF MICROSTRUCTURES OF
PORE SPACES. [1961] 8p.
Order from ATS \$14.95

ATS-87M47R

Trans. of Akad[emiya] Nauk SSSR. Otdel[enie]
Tekhnicheskikh Nauk. Izvestiia: Mekhanika i
Mashinostroenie, 1960, no. 4, p. 41-47.

DESCRIPTORS: *Porous metals, Microstructure.

(Metallurgy--Structural, TT, v. 6, no. 8)

61-25193

I. Nikolaevskii, V. N.
II. ATS-87M47R
III. Associated Technical
Services, Inc.,
East Orange, N. J.

NLL RTS 1972

ATS-RJ-3433

185216

Office of Technical Services

Buzinov, S. N. and Umrikhin, I. D.
INVESTIGATION OF RESERVOIRS AND WELLS
UNDER THE HARMONIC LAW OF RESERVOIR
STIMULATION. [1961] 7p.
Order from ATS \$9.75

ATS-26M46R

Trans. of Akad[emiya] Nauk SSSR, Otdel[enie]
Tekhnicheskikh Nauk (Izvestiya Mekhanika)
Mashinostroenie, 1960, no. 4, p. 48-52.

DESCRIPTORS: *Petroleum, Sources, Storage,
Analysis, Water supplies, Well drilling.

(Engineering, TT, v. 6, no. 4)

61-22227

I. Buzinov, S. N.
II. Umrikhin, I. D.
III. ATS-26M46R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS/KT-2780

177720

Office of Technical Services

62-22178

Aksel'rad, E. L.
EQUATIONS OF DEFORMATION FOR SHELLS OF
REVOLUTION AND FOR THE BENDING OF THIN-
WALLED TUBES SUBJECTED TO LARGE ELASTIC
DISPLACEMENTS, tr. by Nicholas J. Hoff, July 62 [5]p.
11 refs.
Order from ARS in Its Journal, v. 32, no. 7, \$3.00

Trans. of Akademiya Nauk SSSR. Otdel[enie] Tekh[ni-
cheskikh] Nauk. Izvestiya: Mekhanika i Mashinostroenie,
1960, no. 4, p. 84-92.

DESCRIPTORS: *Cylindrical bodies, *Bodies of revolution,
*Deformation, Elasticity, Deflection, Differential
equations.

(Mechanics, TT, v. 8, no. 7)

- I. Aksel'rad, E. L.
- II. Research Information Service,
New York
- III. American Rocket Society,
New York

Office of Technical Services

Damping of Accelerometers with High Natural
Frequencies, by A. I. Mironov, M. I. Subbotin,

RUSSIAN, per, Izv. AN SSSR, Otd. Tekhn. Nauk,
Mekhan. in Mashinost., July-Aug No 4, 1960,
p 132.

ERDL Ft Belvoir
T-1297

Sci - Electron

155,242

Jun 61

Random Parametric Effects in Certain Problems of
Aeroelasticity, by I. S. Romanovskiy,

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 4, 1960, pp 133-135.

NASA TT-F-8008

Sci
Sep 61

168,667

US GOV'T ONLY

Capacitive Method of Measuring ~~Non~~ Nonstationary,
Short Period, Thermal Fluxes, by N. A. Anfimov,
A. P. Shevtzov, 2 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otd. Tekh,
Nauk, Mekhanika i Mashinostroenie, No 4,
pp 163-165, 1960.

ARS Journal
Vol 32, No 5

Sci - *Phys*

Jun 62

198, 624

A ONE-DIMENSIONAL FLOW OF A CONDUCTING GAS WITH
A CONSTANT VELOCITY IN A TRAVELLING MAGNETIC
FIELD, BY YE. I. YANTOVSKIY, 3 PP.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
MEKH I MASH, NO 4, 1960, ~~XXXXXXXXXXXXXXXXXXXX~~
PP 166-167. 9665772

FTD-TT-62-331

SCI - PHYS
JUL 62

~~XXXXXXXX~~
204,464

61-22224

Danilov, V. L. and Skvortsov, V. V.
ELECTRONIC COMPUTER CALCULATIONS OF THE
MOVEMENT OF THE OIL-WATER CONTACT AND
THE TIME OF FLOODING-OUT OF WELLS. [1961]

4p.
Order from ATS \$7.00

ATS-57N48R

Trans. of Akademiya Nauk SSSR, Otdel'enie
Tekhnicheskikh Nauk, Otdel'iya Mekhaniki
Mashinostroyeniya, 1960, no. 4, p. 182-184.

DESCRIPTORS: *Fluid flow, Computers, Mathematical
analysis, *Petroleum, *Water, Well drilling.

(Mechanics--Hydrodynamics, TT, v. 6, no. 4)

I. Danilov, V. L.
II. Skvortsov, V. V.
III. ATS-57N48R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS/KJ-2783

177701

Office of Technical Services

Possible Increase of Base Pressure Behind a Wedge
at Hypersonic Velocities, by E. N. Bondarev,
M. Ya. Iudelovich,

RUSSIAN, per, ~~Iz Ak Nauk SSSR, Otdel Tekh Nauk,~~
~~Mekh i Mash.~~ No 5, Sep-Oct 1960, pp 1-186.

available at JHU/APL
ERDL, FT Belvoir
T-1384

2

Sci - Phys
Aug 61

163,582
11/11/61

NASA TT F-70

National Aeronautics and Space Administration.

AERODYNAMIC EFFECTS OF METEORITES. A

SPECIFIC CASE. (Ob odnom effekte v oblasti

aerodinamiki meteorov.) K. P. Stanyukovich.

August 1961. 12p. OTS price, \$0.50.

(NASA TECHNICAL TRANSLATION F-70. Translation from Akademiia Nauk SSSR, Izvestiia, Otdelenie Tekhnicheskikh Nauk, Mekhanik i Mashinostroenie, no. 5, 1960, p. 3-8.)

Presented is a study of atmosphere molecule collisions on a meteor body. For velocity impacts, the magnitude c_x is found to be greater than theory predicts. For the given deceleration, the density of the atmosphere is thought to be several times lower than previously calculated by means of meteor data.

Copies obtainable from NASA, Washington

I. Stanyukovich, K. P.

II. NASA TT F-70

III. Akademiia Nauk SSSR, Izvestiia, Otdelenie Tekhnicheskikh Nauk, Mekhanik i Mashinostroenie, no. 5, 1960, p. 3-8

(Initial NASA distribution:
5, Atmospheric entry;
6, Astronomy; 20, Fluid
mechanics; 21, Geophysics
and geodesy.)

RMND Corp
RM-2932
9096551

NASA

Skiyanin, Yu. I.
THE MOVEMENT OF A MIXTURE OF THREE
FLUIDS IN A POROUS MEDIUM. [1961] 8p.
Order from ATS \$15.45

ATS-68N50R

Trans. of Akademiya Nauk SSSR. Otdel'eniye
Tekhnicheskikh Nauk (Izvestiya Mekhanika)
Mashinostroyeniye, 1960, no. 5, p. 33-39.

DESCRIPTORS: *Fluid flow, Analysis, Fluids, Porous
materials.

63-10215

61-22610

I. Skiyanin, Yu. I.
II. ATS-68N50R
III. Associated Technical
Services, Inc., East
Orange, N. J.

109625

(Mechanics--Hydrodynamics, TT, v. 6, no. 2)

Ryzhik, V. M.
SHAPE OF THE STABILIZED INTERFACE DURING
THE DISPLACEMENT OF GAS BY LIQUID FROM A
TWO-LAYER STRATUM. [1961] 11p.
Order from ATS \$16.00

ATS-89N-49R

Trans. of Akad[emiya] Nauk SSSR. Otdel[enie]
Tekhnicheskikh Nauk. [Izvestiya] Mekh[anika] i Mash-
inostroenie, 1960, no. 5, p. 40-48.

DESCRIPTORS: *Rock, *Gases, *Liquids.

ATS - RJ-3438

(Engineering, TT, v. 6, no. 8)

61-25182

- I. Title: Hydraulic fracturing
- I. Ryzhik, V. M.
- II. ATS-89N49R
- III. Associated Technical Services
Inc., East Orange,

185215

Office of Technical Services

the Equations of Plane Deformation in Linear Hardening
Having Time Differential Operators, by N. I. Rozovskiy,
14 pp.

RUSSIAN, per, Is Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 5, 1960, pp 80-87. 9666812

FTD-TT-62-1039

Sci - Phys
Nov 62

216,907

Some New Data on the Plasticity of Metals Under
Complex Loading, by V. S. Lenskii.
RUSSIAN, per, Izv AN SSSR OTN Mekh i Mash, No 5,
1960, pp 93-100.
NLL Ref: 9022.09 (4419)

Sci-Tech
Aug 68

361.814

Nezval, Ya.

AXIAL OSCILLATIONS OF DISCS TOGETHER WITH
THE BLADES IN TURBINES (Osevyo Kolebaniya
Diskov Sovmestno s Lopatkami v Turbinakh) tr. by
D. R. H. Phillips. 2 Mar 61 [10]p. (foreign text in-
cluded). Trafford Park trans. no. 2957; [DSIR LLU]
M. 3226.

Order from OTS or SLA \$1.10

61-27624

Trans. of Akad[emiya] Nauk SSSR. Otd[elenie]
Tekh[nicheskikh] Nauk. (Izv[estiya] Makh[anika] i
Mash[inostroenie] 1960, no. 5, p. 118-121.

DESCRIPTORS: *Steam turbines, *Disks, *Steam
turbine blades, Oscillation.

A theoretical determination is made of the natural fre-
quencies of an elastic turbine disc with blades.
(Machinery--Engines, TT, v. 6, no. 11)

61-27624

- I. Nezval, Ya.
- II. AEI TP/T-2957
- III. DSIR LLU M. 3226
- IV. Associated Electrical
Industries, Ltd.
(Gr. Brit.)

188730

Office of Technical Services

61-25210

Teplov, Yu. A.
SIMULTANEOUS FLOW OF OIL AND BOTTOM
WATER TO A WELL. [1961] 6p.
Order from ATS \$10.20 ATS-90NSOR

Trans. of Akad[emiya] Nauk SSSR, Otdel[enie]
Tekh[nicheskikh] Nauk, Izvest[iya] Mekh[anika]
i Mashinostroyeniye, 1960, no. 5, p. 197-200.

DESCRIPTORS: *Fluid flow, Oils, Water.

I. Teplov, Yu. A.
II. ATS-90NSOR
III. Associated Technical
Services, Inc.,
East Orange, N. J.

87220

Office of Technical Services

(Mechanics--Hydrodynamics, TT, v. 6, no. 8)

Kim, V. Yu.
AN APPROXIMATE METHOD OF COMPUTING THE
FLOW UNDER ELASTIC DRIVE WITH VARIABLE
PRESSURE DIFFERENTIAL. [1961] 6p.
Order from ATS \$9.00 ATS-29N50R

Trans. of Akademiya Nauk SSSR, Otdel[eniye]
Tekhnicheskikh Nauk, [zvestiya] Mekhanika 1
Mashinostroyeniye, 1960, no. 5, p. 200-203.

DESCRIPTORS: Numerical analysis, *Differentials,
Pressure, Elasticity, Mechanical drives, Automatic
transmissions.

(Machinery--Machine Parts, TT, v. 6, no. 3)

61-22617

I. Kim, V. Yu.
II. ATS-29N50R
III. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-RJ-3435

170000

Office of Technical Services

On the Influence of Viscosity on the Flow Around
a Wing, by V. V. Golubev,

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 6, 1960, pp 3-14.

*NASA

Sci
Oct 61

List 2

Axially Symmetric Passing of a Vortex Flow,
by O. N. Ovchinnikov.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk Mekh i Mash, No 6, 1960, pp 19-23.

NASA TT F-8136

Sci

6 Mar 62

185,927

US GOV'T ONLY

The Flow of Moist Air in Wind Tunnel Nozzles, by
A. S. Danilov, 30 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mash, No 6, 1960, pp 24-37.
9664293

FED-TT-61-159

Sci - Aero

20 Mar 62

188, 266

On the Stability of Laminar Motion of a Fluid
Containing a Heavy Admixture, by Yu. P. Gupalo,
14 pp.

RUSSIAN, per, Iz Ak Nauk, SSSR, Otdel Tekh
Nauk, Mekh i Mashinostroy, No 6, 1960, 9673052
pp 22-46.

FTD-TT-61-112

Sci - Phys

182,551

15 Feb 62

Zhel'tov, Yu. P.
THE CREATION OF IRREVERSIBLE FRACTURES
IN ROCK STRATA. [1961] 7p.
Order from ATS \$11.75 ATS-17N51R

Trans. of Akad[emiya] Nauk SSSR. Otdel[enie]
Tekhnicheskikh Nauk. Izvest[iya]: Mekh[anika] i
Mashinostroenie, 1960, no. 6, p. 52-56.

DESCRIPTORS: *Rock, Fracture (Mechanics).

(Engineering, TT, v. 6, no. 8)

61-25212

I. Zhel'tov, Yu. P.
II. ATS-17N51R
III. Associated Technical
Services, Inc.,
East Orange, N. J.

185221

Office of Technical Services

Calculation of Nonuniformly Heated
Cylinders in the Elastoplastic Region,
by B. F. Shorr, 11 pp.

RUSSIAN, per: Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mashinostroy, No 6, 1960.
pp 57-62. 9672816

FPD-PT-61-129

Sci - Engr

180, 207

24 Jan 62

Stability of a Spherical Shell Under Finite Deflections
and Asymmetric Strain, by E. I. Grigoryuk, 7 pp.
RUSSIAN, per, Izvestiya Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mash, No 6, 1960, pp 68-73.
CIA/FDD X-5457

Sci - Phys

Oct 64

FOR OFFICIAL USE ONLY

267,666

Bending of Nonlinearly Elastic Three-Fly
Plates, by S. A. Ambartsunyan, 9 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mashinostroy, No 6, 1960,
pp 86-90. 9673098

FTD-TT-61-136

Sci - Engr
2 Mar 62

186,281

Motion Under the Action of a Central Force,
by A. Ripiani, 8 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mash, No 6, 1960, pp 105-108.
9664293

FTD-TT-61-159

Sci - Aero

20 Mar 62

188,268

Calculation of the Radiation Flux in a Laminar
Boundary Layer, by G. M. Andreyev, 6 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk Mekh i Mashinostroy, No 6, 1960, 9673052.
pp 109-111.

FTD-TT-61-112

Sci - Phys

15 Feb 62

Navy Tr 2943/APL T247

182,553

Investigation of Wall Surface Temperature
Behind a Moving Shock Wave, by
M. V. Volodina, et al.
RUSSIAN, per, Iz Ak Nauk SSSR, Otd Tekhn
Nauk Mekhan i Mashinostr, No 6, 1960,
pp 112-116.
NASA TT F-10,219

Sci- Phys
Aug 66

3029,638

Cavitation Flow Past Airfoils, by A. N. IYANOV,
4 5 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 6, 1960, pp 117-120.

AIAA
Vol I, No 1, 1963

Sci - Aerospace

Mar 63

229,871

Comments on the Creep of Steel EI 257
Under a Complex Stressed State, by
V. S. Namestnikov, 3 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel
Tekh Nauk, Mekh i Mashinostroy, No 6,
1960, pp 137-138. 9673098

~~FTD-TT-61-136~~

NLL 11.4810

Sci - Engr
2 Mar 62

186, 274

CERB 1234

The Stressed State in a Cylindrical Shell With
a Reinforced Hole, by I. M. ~~MEK~~ Pirogov, 5 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mashinostroy, No 6, 1960,
pp 166-168. 9673098

FTD-TT-61-136

Sci - Engr

2 Mar 62

186, 276

Influence of the Position of an Elliptical Hole on
Stress Concentration in a Stretched Orthotropic
Plate, by S. G. Lekhnitskiy, V. V. Soldatov. 10 pp.
RUSSIAN, per, Izv OTN Mekhanika i Mashinistroyeniye,
No 1, 1961, pp 3-8.
AIR/FTD/HT-23-653-69

Sci-
June 80

~~Ex~~

Calculation of Critical Velocity of Rolling of a
Pneumatic Tire, by V. L. Biderman, B. I. Bukhin,

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 1, 1961, pp 52-57.

*ERDL/Ft Belvoir

Sci - Engr
Jun 61

(NY-6177)

The Stability of Operation of a Liquid Fuel
Rocket Engine, by K. I. Artomonov, 11 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mashin, No 1, Jan/Feb 1961, pp 64-69.

JPRS 9170

NASA TT F-8112

Sci - Engr

May 61

154, 425

Contribution to the Theory of the Wave Resistance of
a Vessel in Calm Water, by V. G. Sirov, 15 pp.
RUSSIAN, per. Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 1, 1961, pp 73-85.
Navy Tr 4050/Buships Tr 887

Sci-Engr
Mar 65

274,976

HEAT TRANSFER AT THE NOSE OF A BODY WASHED BY
A RADIATING MEDIUM, BY A. N. RUMYNSKIY, 12 PP.

RUSSIAN, PER, IZ AK NAUK, OTN, MEKH I MASH,
NO 1, 1961, PP 96-101. 9677449

FTD-TT-62-115

SCI-PHYS

10 JUL 62

202,205

GAS FLOW IN A CHANNEL IN THE PRESENCE OF HEAT
TRANSFER, BY I. I. MEZHIROV, 10 PP.

RUSSIAN, PER, IZ AK NAUK SSSR, OTN MEKH I MASH,
NO 1, 1961, PP 102X-106. 9677419

FTD-TT-62-115

SCI-PHYS

10 JUL 62

202,286

The Effect of Viscosity on the Flow in the
Region of a Straight Compression Shock, by
A. I. Zubkov, L. I. Sorkin, 13 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 1, 1961, pp 114-120. 9877446

FTD-TT-62-172

Sci - Engr

11 Jul 62

202,283

On Certain Precise Solutions of Equations
of Nonstationary Filtration of 2-phase
Liquid, by V. M. Ryzhik.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk - Mekh i Mash, No 1, 1961, pp 121-126.

ERDL, Ft Belvoir
T-1356

Sci - Engr
Aug 61

164,344

On Displacement of Interface Between Two
Liquids Being weighed in a Horizontal Layer,
by V. D. Pilatovskiy.

RUSSIAN, per. Iz Ak Nauk SSSR, Otdel Tekh
Nauk - Mekh i Mash, No 4, 1961, pp 127-130.

8

1

ERDL, Ft Belvoir
T-1357

Sci - Engr
Aug 61

164,342

Interpenetrating Motion of Miscible Liquids
in a Porous Medium, by M. I. Shvidler.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk - Mekh i Mash, No 1, 1961, pp 131-134.

ERDL, Ft Belvoir
T-1358

Sci - Phys
Aug 61

164, 337

Hypersonic Flow Around Thin Blunted Bodies,
by M. D. Ladyzhevskiy, 6 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Meln 1
Mash, No 1, 1961, pp 150-151. 0677343

FTD-TT-62-639

Sci - Phys

10 Jul 62

202,200

Influence of the Laminar Boundary Layer
in the Flow Past A Thin Blunted Cone
at High Supersonic Velocities, by
I. N. Murzinov, 3 pp.
RUSSIAN, per, Iz An SSSR, Mekhanika i
Mashinostroyeniye, No 1, 1961,
pp 152-153. P100072866
FTD-TT-65-1118

Sci-Mathys
Jan 67

317,481

Method of Determining the Thermophysical
Characteristics of Insulating Materials using
the Thermal Impulse from Shock Waves as a Source
of Heat, by Yu. A. Dem'yanov and N. V. Cheresheva

RUSSIAN, per, Izvestiya Akad Nauk SSSR, Otdel
Tekh Nauk, Mekhan i Mashinostroyeniye, Nr 1, 1961,
pp 153-154

* FTD-TT-62-332

Sci-Engr
Phys
Mar 62

On the Interaction of Shock Waves in Water-Saturated Earth and In Water, by G. M. Lyakhov. 9 pp.
RUSSIAN, rpt, AN SSSR. Izvestiya. Mekhanika i Mashinostroyeniye. OTN, No 1, 1961, pp 155-158.
AIR/FTD/HT-23-872-70

April 71

On the Application of the "Law of Plane Sections"
to the Determination of the Aerodynamic Forces
Acting on Oscillating Shells, by V. V. Bolotin,
7 pp.

RUSSIAN, per, AN SSSR. Izvestiya. Mekhanika
Mashinostroyeniye, No 1, 1961, pp 159-162.

F100081268-V

FTD-HT-66-763

Sci-Phys

May 68

356.331

Kosmodamkanski, A. S.

STRESSES IN AN ANISOTROPIC PLATE WITH TWO
DIFFERENT HOLES (O Napryazhennom Sostoyani
Anizotropnoi Plastinki s Dvumya Neodinakovymi
Otvorstiyami) L. Meyer, tr. Jan 62 [6p] Srefta
S. M. R. E. Trans. no. 4651; [DSIR] NLL M. 3678.
Order from OTS, SLA, or ETC \$1.10 TT-64-13273

Trans. of ~~Akad[emiya] Nauk SSSR Otdelenie]~~
~~Tekhnicheskikh Nauk, Seriya Mekh[anika]~~,
~~Mashinostroyeniye~~ 1961, no. 1, p. 175-177.

(Mechanics, TT, v. 12, no. 2)

TT-64-13273

- I. Kosmodamkanski, A. S.
- II. SMRE-Trans-4651
- III. DSIR-NLL-M. 3678
- IV. Safety in Mines Research
Establishment,
Buxton (England)

Office of Technical Services

Certain Features in the Transverse Deformation
of Cylindrical Shafts with an Annular
Groove, by R. D. Vaganov, 12p.

RUSSIAN, per, Azvestiya, Akademiya Nauk
SSSR. Mekhanika i Mashinostroenie, No 2,
1961, pp 17-23.

SLA TT-66-61663

ILL 9022.09B

333, 558

Sci
Jul 67

A GYROSCOPIC LINEAR ACCELEROMETER, BY
M. Z. LITVIN-SEDOY, 13 PP.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
MEKH I MASH, NO 2, ~~XXIX~~ 1961, PP 55-60.
9665943

FIR-~~TT-62-486~~

SCI - ENRGR
AUG 62

207,969

Calculation of Factors, Affecting the Accuracy
in Determining the Drift of Floating Integrating
Gyroscopes, by G. A. Slonianskiy, 13 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh 1 Mash, No 2, 1961, pp 61-69.
9667356

PTD-TT-62-1231

Sci - Engr
Jan 63

219,981

Equations of the Free-Flow of Molecules
Around Objects, by E. Larish, 13 pp.

Issued. Ser. 12 NI LOMI USSR. Otdel Tekh.
izh. Mash. i Mashinstroy, No 2, 1961,
pp. 70-77. 5671302

FTD-TP-61-57

Sci - Math; Phys

181, 209

31 Jan 62

Three-Dimensional Compressible Flow in Axial
Turbo-Machines, 2 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Mekh i Mash,
No 2, 1961, pp 78-88.

CIA/FDD XX-1039
NOT RELEASABLE TO FOREIGN NATIONALS

Sci

Sep 61

USIB INTERNAL USE ONLY

63-23477

Telenin, G. F. and Tinyakov, G. P.
**UNSTEADY SUPERSONIC FLOW OVER A CONE WITH
 A BLUNTED TIP** (Nestatsionarnoe Sverkhzvukovoe
 Obtekanie Konusa s Okruglennoi Verkhinnoi) tr. by
 John W. Brook and V. Michael Pick. Dec 62 [27]p.
 2 refs. Grumman Research dept. Trans. TR-24;
 AD-294 335.
 Order from OTS or SLA \$2.60 63-23477

Trans. of Akademiya Nauk SSSR. Otdeleniye Tikhim-
 chekaya) Nauk. Izvestiya Mekhanika i Mashinostroe-
 nie, 1961, no. 2 [p. 97-105].

DESCRIPTORS: Supersonic flow, Conical bodies, *Blunt,
 bodies, Oscillation, Moments, Equations, Pressure,
 Drag, Supersonics.

Equations are derived for determining the flow character-
 istics for blunted tip cones in an unsteady supersonic
 flow. Included are equations for the aerodynamic mo-
 ments acting on an oscillating body in supersonic flow.

I. Telenin, G. F.
 II. Tinyakov, G. P.
 III. GWT TR-24
 IV. Grumman Aircraft Engineer-
 ing Corp., Bethpage, N.Y.
 V. AD-294 335

(Mechanics--Aerodynamics,
 TT, v. 10, no. 9)

Office of Technical Services

Classification of Flows in Air Shock Tubes, by
G. M. ~~XXXXXX~~ Arutyunyan, 13 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 2, 1961, pp 106-111. 9683265

FTD-TT-63-309

Sci-Phys
Jun 63

NLL/KTS 2231

234,625

Radial Flow of an Electroconductive Gas
in a Moving Magnetic Field, by
Ye. I. Yantovskiy, 5 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Mekh
i Mash, No 2, 1961, pp 114-115. 9698931
FTD-TT-65-1659

Sci - Engr
Feb 66

296,394

THE EFFECT OF A MAGNETIC FIELD ON THE FLOW OF A
CONDUCTING GAS IN A PLANE TUBE IN THE PRESENCE
OF HEAT TRANSFER THROUGH THE WALLS, BY
E. P. ZIMIN, 6 PP.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
MEKH I MASH, NO 2, 1961, PP 117-119. 9665786

FTD-TT-62-333

SCI - PHYS
JUL 62

204,463

B

BOUNDARY LAYER ON A PLATE TAKING INTO ACCOUNT NON-
EQUILIBRIUM DISSOCIATION, BY V. P. STULOV, 13 PP.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
MEKH I MASH, NO 3, 1961, PP 5-12. 9678213

FTD-TT-62-799

SCI - ENGR
11 OCT 62

212,368

NONEQUILIBRIUM DISSOCIATING-AIR CURRENTS CLOSE TO
EQUILIBRIUM, BY L. M. PAVLOVA, 9 PP.

RUSSINN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
MEKH I MASH, NO 3, 1961, PP 13-17. 9678213

FTD-TT-62-799

SCI - ENGR
11 OCT 62

212,369

An Hypothesis on the Universality of Ejection
Properties of Turbulent Gas Jets and Its Application,
by O. V. Yakovlevskiy, 30 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 3, 1961, pp 40-54. 9668621

FTD-TT-63-222

Sci-Phys
May 63

230,850

Mixing Turbulent Jets of Different Density, 7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel ~~Tekhn~~ Tekh
Nauk, Mekh i Mash, No 3, 1961, pp 55-57. 9668621

FTD-TT-63-222

Sci-Phys
May 63

230,851

Classification of Flows in Air Shock Tubes,
by G. M. Arutyunyan,

RUSSIAN, per, Izves Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 3, 1961, pp 106-111.

*FTD-TT-63-309

Sci - Engr

Mar 63

Vibrations of Twisted Rods, by B. F. Shorr.

RUSSIAN, per, Iz Ak Nauk Otdel Tekh Nauk Mekh i Mashin, No 3, 1961, pp 102-112.

CEGB 3002

Apr 64

Bending of Thin-Walled Columns Under Large Elastic Displacements, by E. L. Aksel'rad, 11 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 3, 1961, pp 124-132.

CIA FDD XX-1348
NO FOREIGN DISSEM

Sci - Phys

Mar 63
USIB INTERNAL USE ONLY

THE EFFECT OF PLASTIC, TENSILE PRESTRAIN
ON THE FATIGUE STRENGTH OF STEEL, BY
M. YA. GALPERIN, ET AL.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK
MEKH MASH, NO 3, 1961, PP 161, 162.

NLL M.3488

SCI - ENGR

JUN 62

199,095

CR-39/64
(BD #6-64)

Boris Sergeyevich Stechkin. (SF-3041)

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
No 4, 1961, pp 3, 4.

*JPRS

Sci - Misc
Mar 64

Homogeneous Plasma Turbulence in a Strong
Magnetic Field, by M. M. Prudnikov, 8 pp.

RUSSIAN, per, Is Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mashinostroy, No 4, 1961,
pp 10-13. 9664308

FED-TR-61-93

Sci - Phys

19 Mar 62

188, 316

EFFECT OF RADIAL FLOW BETWEEN THE ROTATING DISC AND
HOUSING ON THEIR RESISTANCE AND HEAT TRANSFER, BY
L. A. DOREMAN, 13 PP.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
MEKH I MASH, NO 4, 1961, ~~PP 26-32. 9678384~~
PP 26-32. 9678384

FTD-TT-62-1038

SCI - ENGR
11 OCT 62

212,360

Experimental Investigation of Free Oscillations
of a Fluid in a Vessel, by G. Mikishev,
N. Dorozhkin.
RUSSIAN, per, Izv Ak Nauk SSSR, Mekh Mash,
No 4, 1961, pp 48-53.
CSIRO No 9784

Sci-Phys
Dec 69

398,219

Experimental Investigation of Free Oscillations
of Liquids in Containers, by G. N. Mikishev,
N. Ya. Dorozhkin, 6 p.
RUSSIAN, per, Izvestiya Akademii Nauk, OTN
Mekhanika i Mashinostroyeniye, No 4, 1961,
pp 48-53. 9698601
DDC RSIC-483

Sci- *Engineering Journal*
Jan 66

Effect of the Time Factor on the Strength
of a Spherical Shell Subjected to Inter-
nal Pressure, by M. I. Rozovskiy, 8 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Mekh
i Mash, No 4, 1961, pp 124-129. 9227079
AEC/Risley Tr 280

Sci-Engr
Apr 65

277,060

Creep in a Concrete Block at Elevated
Temperatures, by M. A. Zadovyan.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 4, 1961, pp 130-135.

ILL M. 3855

Sci - Engr

Nov 62

217,538

Flow of Electrically Conducting Gas in a
Channel With a Traveling Magnetic Field,
by E. P. Zimin, Ye. I. Yantovskiy,
8 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mash, No 4, 1961,
pp 170-172. 9673044

FTD-TT-61-113

Sci - Phys

182,602

15 Feb 62

The Energetic Parameter and Scale Effect in
Cavitation Erosion, by K. K. Shal'nev. 15 pp.
RUSSIAN, per, Izvestiya AN SSSR. Mekhanika i
Mashinostroyeniye, No 5, 1961, pp 3-10.
AIR/FTD-HT-23-73-69

/

sci/ materials
sept 69

390,968

Effect of Joule Heating on Heat Transmission
at the Critical Point, by V. A. Polyanskiy,
7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mash, No 5, 1961, pp 11-15.
9668610

FTD-TT-63-91

Sci-Phys
May 63

280,802

Determining the Base Pressure and Base Temperature
on the Sudden Expansion of a Sonic or Supersonic
Flow, by R. K. Tagirov, 13 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk.
Mekh i Mash, No 5, 1961, pp 30-37. 9668610

FTD-TT-63-91

Sci-Phys
May 63

230,863

Stability of a Cylindrical Shell Under the
Effect of a Moving Load, by V. L. Prisekin.

RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Mekh i Mash,
No 5, 1961, pp 133, 134.

*FTD-MT-62-26

Sci - Machine Translation
7 Aug 62

62-17280

Alikhashkin, Ya. L.
NUMERICAL INTEGRATION OF THE EQUATION
MODELING THE MOVEMENT OF A TWO-FLUID
INTERFACE IN A POROUS MEDIUM. [1962] 6p.
Order from ATS \$7.75 ATS-96P59 R

Trans. of Akad[emiya] Nauk SSSR. Otdel[enie]
Tekh[nicheskikh] Nauk. Izvest[ia]: Mekh[anika] i
Mashinostr[oenie] 1961, no. 5, p. 159-162.

DESCRIPTORS: *Fluid flow, Numerical analysis,
Differential equations, Integration.

(Mechanics--Hydrodynamics, TT, v. 8, no. 2)

I. Alikhashkin, Ya. L.
II. ATS-96P59R
III. Associated Technical Services, Inc.,
East Orange, N. J.

Office of Technical Services

Gorbanov, A. I. and Nikolaevskii, V. N.
STEADY-STATE FLOW OF FLUID INTO WELLS
UNDER VOLUMETRIC CONTROL CONDITIONS,
[1962] 7p.
Order from ATS \$11.45 ATS-53F60R

Trans. of Akad[emiya] Nauk SSSR. Otdel[enie]
Tekh[nicheskikh] Nauk. Izvest[iya] Mekh[anika] i
Mashinostr[oenie] 1961, no. 5, p. 165-167.

DESCRIPTORS: Petroleum, Sources. *Fluid flow,
Volume, Control.

(Engineering-Chemical, ET, v. 8, no. 4)

62-17744

- I. Gorbanov, A. I.
- II. Nikolaevskii, V. N.
- III. ATS-53F60R
- IV. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

63-12851

Kim, V. Yu.
AN APPROXIMATE SOLUTION FOR THE PROBLEM
OF NONSTEADY-STATE FLOW OF FLUID TO A
WELL WITH A GIVEN BOTTOM-HOLE PRESSURE.
[1963] 7p.
Order from ATS \$8.00

ATS-00Q67R

Trans. of Akad[emiya] Nauk SSSR, Otd[elenie]
Tekhn[icheskikh] Nauk, Izv[estiya] Mekhanika i
Mashinost[roenie] 1961, no. 5, p. 174-177.

DESCRIPTORS: Well drilling, Boreholes, *Fluid flow,
Pressure

(Earth Sciences--Geology, TT, v. 9, no. 9)

- I. Kim, V. Yu.
- II. ATS-00Q67R
- III. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Solution of Equations of Boundary Layer at Critical
Point for Ternary Mixture, by A. B. Karasev, 16 pp.

RUSSIAN, per, Iz Ada Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, Nr. 6, 1961, pp 3-10.
9678620

FTD-TT-62-494

Sci - Phys
Nov 62

216,931

Heat Transfer in Laminary Boundary Layer on a
Plate With Consideration of Chemical Non-
equilibrium, by V. P. Stulov, 7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 6, 1961, pp 11-14. 9683159

FTD-TT-62-1752

Sci-Phys
Jun 63

232,466

Calculation of ~~SSR~~ Axially Symmetric Supersonic Annular
Nozzles, by U. G. Pirumov, V. A. Rubtsov, 22 pp.

RUSSIAN, per, Iz Ada Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, Nr. 6, 1961, pp 15-25.
9678620

FTD-TT-62-494

216,930

Sci - Engr
Nov 62

R-5770-D
3 Sept 65

Flow of Humid Air in Nozzles of Aerodynamic Tubes

By: A. S. Danilov

From: AKAD NAUK SSSR Izv., OTN MAKH I MASH #6, 1961
pp 24-37 (14pp)

Russian - est for wds:

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formulas. Put caption translation at the end.

Concerning Riemann waves, by N. V. Saltanov,
V. S. Tkach, 14 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 6, 1961, pp 26-32. 9677218

FTD-TT-62-354

Sci - Phys
Jun 62

199,511

The Flow of Gas Near the Stagnation Point of a
Blunt Body With a Finite Rate of Excitation
of Vibrational Degrees of Freedom, by I. N.
Murzinov, 8 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk Mekh i Mash, No 6, 1961, pp 33-36. 9667347

FTD-TT-62-1313

Sci - Chem, Engr
Jan 63